

AMENDMENTS TO THE CLAIMS

1-99. **(Canceled)**

100. **(New)** A method of treating melanoma in a subject, comprising topically applying for at least 30 days a 1 to 15% w/w composition of Coenzyme Q10 to the site of the melanoma effective to reduce the growth of the melanoma.

101. **(New)** A method of treating melanoma in a subject, comprising topically applying for at least 30 days a 1 to 15% w/w composition of Coenzyme Q10 in an amount of no more than 4.0 mg per kg of body weight to the site of the melanoma effective to reduce the growth of the melanoma.

102. **(New)** The method of claim 100, wherein the subject is human.

103. **(New)** The method of claim 100, wherein the composition comprising Coenzyme Q10 is formulated as a topical cream.

104. **(New)** The method of claim 100, wherein the composition comprising Coenzyme Q10 is liposomal.

105. **(New)** The method of claim 100, wherein the composition comprises 1% to 10% w/w of Coenzyme Q10.

106. **(New)** The method of claim 100, wherein the composition comprises 1% to 5% w/w of Coenzyme Q10.

107. **(New)** The method of claim 100, wherein the composition comprising Coenzyme Q10 is administered with an additional anti-cancer agent.

108. **(New)** The method of claim 100, wherein the additional anti-cancer agent is a chemotherapeutic agent.
109. **(New)** The method of claim 108, wherein the chemotherapeutic agent is selected from the group consisting of cyclophosphamide, taxanes, busulfan, methotrexate, daunorubicin, doxorubicin, melphalan, and cladribine.
110. **(New)** The method of claim 108, wherein the chemotherapeutic agent is selected from the group consisting of vincristine, vinblastine, chlorambucil, tamoxifen, taxol, camptothecin, actinomycin-D, mitomycin C, and combretastatin.
111. **(New)** The method of claim 108, wherein the chemotherapeutic agent is selected from the group consisting of cisplatin, etoposide, verapamil, and podophyllotoxin.
112. **(New)** The method of claim 108, wherein the chemotherapeutic agent is 5-fluorouracil.
113. **(New)** The method of claim 107, wherein the additional agent is an anti-angiogenic agent.
114. **(New)** The method of claim 107, wherein the additional anti-cancer agent is co-administered with the composition comprising Coenzyme Q10 to the subject.
115. **(New)** The method of claim 107, wherein administration of the additional anti-cancer agent precedes administration of the composition comprising Coenzyme Q10 to the subject.
116. **(New)** The method of claim 107, wherein administration of the additional anti-cancer agent follows administration of the composition comprising Coenzyme Q10 to the subject.
117. **(New)** The method of claim 100, wherein treatment results in an increase in apoptosis of melanoma cells in the subject.

118. **(New)** The method of claim 100, wherein treatment results in inhibition of melanoma-mediated angiogenesis in the subject.